· G. Lee

Page 1 of 7 # ?

Oundo

1632 7/12/00

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/495,947

DATE: 06/05/2000 TIME: 10:41:03

Input Set : A:\527001al.app

Output Set: N:\CRF3\06022000\1495947.raw

3 <110> APPLICANT: Coleman, Timothy P. Peterson, Darrell L. 6 <120> TITLE OF INVENTION: Advanced Antigen Presentation Platform 8 <130> FILE REFERENCE: 05270001ta 10 <140> CURRENT APPLICATION NUMBER: 09/495,947 11 <141> CURRENT FILING DATE: 2000-02-02 13 <150> PRIOR APPLICATION NUMBER: US 60/118,526 14 <151> PRIOR FILING DATE: 1999-02-02 16 <160> NUMBER OF SEQ ID NOS: 24 18 <170> SOFTWARE: PatentIn Ver. 2.1 20 <210> SEQ ID NO: 1 21 <211> LENGTH: 262 22 <212> TYPE: PRT 23 <213> ORGANISM: Duck hepatitis B virus 25 <400> SEQUENCE: 1 26 Met Asp Ile Asn Ala Ser Arg Ala Leu Ala Asn Val Tyr Asp Leu Pro $\frac{1}{5}$ $\frac{1}{10}$ $\frac{1}{15}$ 29 Asp Asp Phe Phe Pro Lys Ile Asp Asp Leu Val Arg Asp Ala Lys Asp 30 20 30 32 Ala Leu Glu Pro Tyr Trp Arg Ser Asp Ser Ile Lys Lys His Val Leu 33 35 40 4535 Ile Ala Thr His Phe Val Asp Leu Ile Glu Asp Phe Trp Gln Thr Thr $36 \qquad 50 \qquad \qquad 55 \qquad \qquad 60$ 38 Gln Gly Met His Glu Ile Ala Glu Ala Leu Arg Ala Val Ile Pro Pro 39 65 70 75 80 41 Thr Thr Thr Pro Val Pro Ala Gly Tyr Leu Ile Gln His Glu Glu Ala 42 85 90 95 44 Glu Glu Ile Pro Leu Gly Asp Leu Phe Lys His Gln Glu Glu Arg Ile 45 100 105 110 47 Val Ser Phe Gln Pro Asp Tyr Pro Ile Thr Ala Arg Ile His Ala His 48 115 120 125 50 Leu Lys Ala Tyr Ala Lys Ile Asn Glu Glu Ser Leu Asp Arg Ala Arg 51 130 135 140 53 Arg Leu Leu Trp Trp His Tyr Asn Cys Leu Leu Trp Gly Glu Ala Asn 54 145 150 155 160 56 Val Thr Asn Tyr Ile Ser Arg Leu Arg Thr Trp Leu Ser Thr Pro Glu 57 165 170 175 59 Arg Tyr Arg Gly Arg Asp Ala Pro Thr Ile Glu Ala Ile Thr Arg Pro 60 180 185 190 62 Ile Gln Val Ala Gln Gly Gly Arg Lys Thr Ser Ser Gly Thr Arg Lys 63 195 200 205 65 Pro Arg Gly Leu Glu Pro Arg Arg Arg Lys Val Lys Thr Thr Val Val 66 210 215 220 68 Tyr Gly Arg Arg Arg Ser Lys Ser Arg Asp Arg Arg Ala Pro Ser Pro 69 225 230 235 240 71 Gln Arg Ala Gly Ser Pro Leu Pro Arg Ser Ser Ser His Arg Arg

ENTERED

RECEIVED

IN 26 2000

TECH CENTER 1600/2000

RAW SEQUENCE LISTING DATE: 06/05/2000 PATENT APPLICATION: US/09/495,947 TIME: 10:41:03

Input Set : A:\527001al.app

```
74 Ser Pro Ser Pro Arg Lys
               260
75
78 <210> SEQ ID NO: 2
79 <211> LENGTH: 786
80 <212> TYPE: DNA
81 <213> ORGANISM: Duck hepatitis B virus
83 <400> SEQUENCE: 2
84 atggatatca atgcttctag agccttagcc aatgtttatg atttgccaga tgatttcttc 60
85 ccaaaaattg atgatettgt aagggatgeg aaggatgett tagaacetta ttggagatea 120
86 gattcaataa agaaacatgt tttaattgca actcactttg tggatcttat tgaagacttc 180
87 tggcaaacta ctcagggtat gcatgaaata gctgaagcct taagagcagt tataccacct 240
88 actacaacac cagtteeege aggatatetg atteageacg aagaggetga ggagatteet 300
89 ctgggagatt tatttaaaca tcaggaagaa aggatagtta gtttccaacc ggattatect 360
90 attactgcac gaattcatgc acacctgaaa gcttatgcaa agattaacga ggaatcactg 420
91 gatagggcta ggagattgct ttggtggcat tacaattgtt tactgtgggg agaagctaac 480
92 gttactaatt atattteteg gettegeact tggetateaa caeetgagag atacagagge 540
93 cgagatgece caaccattga agcaatcact agaccaatee aagtggetea gggaggeaga 600
94 aaaacatett egggtaetag aaaacetegt ggaetegaac etagaagaag aaaagttaaa 660
95 accacagtty totatgggag aagacgttoa aagtocaggg ataggagago coettcacco 720
96 caacgtgcgg geteecetet eeegegtagt tegageagee acagaagate teeetegeet 780
97 aggaaa
100 <210> SEQ ID NO: 3
101 <211> LENGTH: 20
102 <212> TYPE: DNA
·103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Description of Artificial Sequence:
          immunostimulating oligonucleotides
107
109 <400> SEQUENCE: 3
                                                                       20
110 tocatgtcgc tectgatgct
113 <210> SEQ ID NO: 4
114 <211> LENGTH: 20
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Description of Artificial Sequence:
120
          immunostimulating oligonucleotides
122 <400> SEOUENCE: 4
                                                                       20
123 tccatgtcgt tcctgatgct
126 <210> SEQ ID NO: 5
127 <211> LENGTH: 24
128 <212> TYPE: DNA
129 <213> ORGANISM: Artificial Sequence
131 <220> FEATURE:
132 <223> OTHER INFORMATION: Description of Artificial Sequence:
133
           immunostimulating oligonucleotides
135 <400> SEQUENCE: 5
136 tcgtcgtttt gtcgttttgt cgtt
                                                                       24
139 <210> SEQ ID NO: 6
```

RAW SEQUENCE LISTING DATE: 06/05/2000 PATENT APPLICATION: US/09/495,947 TIME: 10:41:03

Input Set : A:\527001a1.app

```
140 <211> LENGTH: 20
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: Description of Artificial Sequence:
          immunostimulating oligonucleotides
148 <400> SEQUENCE: 6
149 togtogttgt cgttgtcgtt
                                                                         20
152 <210> SEQ ID NO: 7
153 <211> LENGTH: 24
154 <212> TYPE: DNA
155 <213> ORGANISM: Artificial Sequence
157 <220> FEATURE:
158 <223> OTHER INFORMATION: Description of Artificial Sequence:
          {\tt immunostimulating\ oligonucleotides}
161 <400> SEQUENCE: 7
162 tcgtcgtttt gtcgttttgt cgtt
                                                                         24
165 <210> SEQ ID NO: 8
166 <211> LENGTH: 22
167 <212> TYPE: DNA
168 <213> ORGANISM: Artificial Sequence
170 <220> FEATURE:
171 <223> OTHER INFORMATION: Description of Artificial Sequence:
172
          {\tt immunostimulating\ oligonucleotides}
174 <400> SEQUENCE: 8
175 togtogttgt cgttttgtcg tt
                                                                        22
178 <210> SEQ ID NO: 9
179 <211> LENGTH: 21
180 <212> TYPE: DNA
181 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Description of Artificial Sequence:
185
          immunostimulating oligonucleotides
187 <400> SEQUENCE: 9
188 gcgtgcgttg tcgttgtcgt t
                                                                        21
191 <210> SEQ ID NO: 10
192 <211> LENGTH: 21
193 <212> TYPE: DNA
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artificial Sequence:
198
          immunostimulating oligonucleotides
200 <400> SEQUENCE: 10
201 tgtcgtttgt cgtttgtcgt t
                                                                        21
204 <210> SEQ ID NO: 11
205 <211> LENGTH: 19
206 <212> TYPE: DNA
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
```

RAW SEQUENCE LISTING DATE: 06/05/2000 PATENT APPLICATION: US/09/495,947 TIME: 10:41:03

Input Set : A:\527001al.app

```
210 <223> OTHER INFORMATION: Description of Artificial Sequence:
          immunostimulating oligonucleotides
213 <400> SEQUENCE: 11
214 tgtcgttgtc gttgtcgtt
                                                                        19
217 <210> SEQ ID NO: 12
218 <211> LENGTH: 14
219 <212> TYPE: DNA
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: Description of Artificial Sequence:
224
          immunostimulating oligonucleotides
226 <400> SEQUENCE: 12
227 tcgtcgtcgt cgtt
                                                                       14
230 <210> SEQ ID NO: 13
231 <211> LENGTH: 20
232 <212> TYPE: DNA
233 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Description of Artificial Sequence:
237
          immunostimulating oligonucleotides
239 <400> SEQUENCE: 13
240 teetgtegtt cettgtegtt
                                                                       20
243 <210> SEQ ID NO: 14
244 <211> LENGTH: 20
245 <212> TYPE: DNA
246 <213> ORGANISM: Artificial Sequence
248 <220> FEATURE:
249 <223> OTHER INFORMATION: Description of Artificial Sequence:
250
          immunostimulating oligonucleotides
252 <400> SEQUENCE: 14
253 teetgtegtt ttttgtegtt
                                                                       20
256 <210> SEQ ID NO: 15
257 <211> LENGTH: 21
258 <212> TYPE: DNA
259 <213> ORGANISM: Artificial Sequence
261 <220> FEATURE:
262 <223> OTHER INFORMATION: Description of Artificial Sequence:
263
          immunostimulating oligonucleotides
265 <400> SEQUENCE: 15
266 togtogotgt otgocottot t
                                                                       21
269 <210> SEQ ID NO: 16
270 <211> LENGTH: 21
271 <212> TYPE: DNA
272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Description of Artificial Sequence:
          immunostimulating oligonucleotides
278 <400> SEQUENCE: 16
279 tcgtcgctgt tgtcgtttct t
                                                                       21
```



 RAW SEQUENCE LISTING
 DATE: 06/05/2000

 PATENT APPLICATION:
 US/09/495,947
 TIME: 10:41:03

Input Set : A:\52700lal.app

```
282 <210> SEQ ID NO: 17
283 <211> LENGTH: 24
284 <212> TYPE: DNA
285 <213> ORGANISM: Artificial Sequence
287 <220> FEATURE:
288 <223> OTHER INFORMATION: Description of Artificial Sequence:
          immunostimulating oligonucleotides
291 <400> SEQUENCE: 17
292 togtcgtttt gtcgttttgt cgtt
                                                                           24
295 <210> SEQ ID NO: 18
296 <211> LENGTH: 22
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Description of Artificial Sequence:
          immunostimulating oligonucleotides
304 <400> SEQUENCE: 18
305 tcgtcgttgt cgttttgtcg tt
                                                                           22
308 <210> SEQ ID NO: 19
309 <211> LENGTH: 19
310 <212> TYPE: DNA
311 <213> ORGANISM: Artificial Sequence
313 <220> FEATURE:
314 <223> OTHER INFORMATION: Description of Artificial Sequence:
315
          immunostimulating oligonucleotides
317 <400> SEQUENCE: 19
318 tgtcgttgtc gttgtcgtt
                                                                           19
321 <210> SEQ ID NO: 20
322 <211> LENGTH: 6
323 <212> TYPE: DNA
324 <213> ORGANISM: Artificial Sequence
326 <220> FEATURE:
327 <223> OTHER INFORMATION: Description of Artificial Sequence:
         immunostimulating oligonucleotides
330 <400> SEQUENCE: 20
331 racgty
                                                                           6
334 <210> SEQ ID NO: 21
335 <211> LENGTH: 239
336 <212> TYPE: PRT
337 <213> ORGANISM: Duck hepatitis B virus
339 <400> SEQUENCE: 21
340 Met Asp Ile Asn Ala Ser Arg Ala Leu Ala Asn Val Tyr Asp Leu Pro
341 1
343 Asp Asp Phe Phe Pro Lys Ile Asp Asp Leu Val Arg Asp Ala Lys Asp 344 20 25 30
346 Ala Leu Glu Pro Tyr Trp Arg Ser Asp Ser Ile Lys Lys His Val Leu 347 \phantom{\bigg|} 35 \phantom{\bigg|} 40 \phantom{\bigg|} 45
349 Ile Ala Thr His Phe Val Asp Leu Ile Glu Asp Phe Trp Gln Thr Thr
350 50 60
```

VERIFICATION SUMMARY

DATE: 06/05/2000 TIME: 10:41:04

PATENT APPLICATION: US/09/495,947

Input Set : A:\527001a1.app
Output Set: N:\CRF3\06022000\I495947.raw